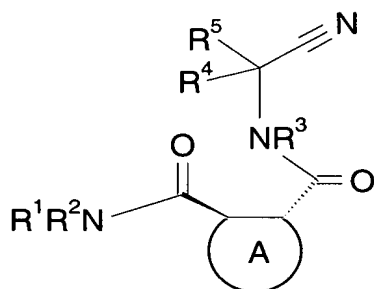


Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (Currently amended) Use of A method of inhibiting Cathepsin S in a warm blooded animal comprising administering a compound of formula (I):



(I)

in which:

A is a 6-membered ring optionally containing a double bond and optionally containing an oxygen atom or NR group in the ring;

R is hydrogen or C₁₋₆ alkyl;

R¹ and R² are independently, C₁₋₆ alkyl or C₃₋₆ cycloalkyl both of which can optionally contain one or more O, S or NR³ groups, or R¹ and R² together with the nitrogen atom to which they are attached form a 3,4-dihydroisoquinoline ring or a 5- or 6-membered saturated ring optionally containing a further O, S or N atom and optionally substituted by a group -(CH₂)_p-R⁶ where p is 0 to 3 and R⁶ is C₁₋₆ alkyl, CONR⁷R⁸ where R⁷ and R⁸ are independently hydrogen, C₁₋₆ alkyl which can optionally contain one or more O, S or NR³ groups, or together with the nitrogen atom to which they are attached form a 5- or 6-membered saturated ring optionally containing a further O, S or NR³ group; or R⁶ is a 4 to 7-membered saturated ring optionally containing one or more O, S or N atoms, or an aryl or heteroaryl group containing one to four heteroatoms selected from O, S or N, the saturated ring, aryl and heteroaryl groups all being optionally substituted by halogen, amino, hydroxy, cyano, nitro, carboxy, CONR⁷R⁸, SO₂NR⁷R⁸, SO₂R³, trifluoromethyl, NHSO₂R³,

NHCOR³, C₁₋₆ alkyl, C₁₋₆ alkoxy, SR³ or NR⁹R¹⁰ where R⁹ and R¹⁰ are independently hydrogen, C₁₋₆ alkyl or together with the nitrogen atom to which they are attached form a 5- or 6-membered saturated ring optionally containing a further O, S or NR³ group;

R³ is hydrogen or C₁₋₆ alkyl;

R⁴ is hydrogen or C₁₋₆ alkyl;

R⁵ is hydrogen, C₁₋₆ alkyl or C₃₋₆ cycloalkyl both of which can optionally contain one or more O, S or NR³ groups or R⁵ is aryl or a 5- or 6-membered heteroaryl group containing one or two heteroatoms selected from O, S or N, the aryl and heteroaryl groups all being optionally substituted by halogen, amino, hydroxy, cyano, nitro, carboxy, CONR⁷R⁸, SO₂NR⁷R⁸, SO₂R³, trifluoromethyl, NHSO₂R³, NHCOR³, C₁₋₆ alkyl, C₁₋₆ alkoxy, SR³ or NR⁹R¹⁰ where R⁹ and R¹⁰ are independently hydrogen, C₁₋₆ alkyl or together with the nitrogen atom to which they are attached form a 5- or 6-membered saturated ring optionally containing a further O, S or NR³ group;

or R⁴ and R⁵ together form a 5- or 6-membered saturated ring optionally containing a further O, S or NR³ group and optionally substituted by , C₁₋₆ alkyl;

and pharmaceutically acceptable salts or solvates thereof, ~~in the manufacture of a medicament for use in the inhibition of Cathepsin S in~~ to a warm blooded animal, such as man.

Claim 2. (currently amended) ~~Use~~ The method according to claim 1, ~~wherein~~ in which A is a cyclohexane ring.

Claim 3. (currently amended) ~~Use~~ The method according to claim 1, ~~wherein or 2 in which~~ R¹ and R² together with the nitrogen atom to which they are attached form an unsubstituted morpholine ring or a piperidine ring substituted by a group -(CH₂)_p-R⁶ where p and R⁶ are as defined in claim 1.

Claim 4. (currently amended) ~~Use~~ The method according to ~~any one of claims 1 to 3~~ claim 1, ~~in which~~ wherein R³ is hydrogen.

Claim 5. (currently amended) ~~Use~~ The method according to ~~any one of claims 1 to 4~~ claim 1, ~~wherein in which~~ R⁴ is hydrogen.

Claim 6. (currently amended) ~~Use The method according to any one of claims 1 to 5~~claim 1, wherein ~~in which~~ R^5 is hydrogen or phenyl optionally substituted by C_{1-6} alkyl or C_{1-6} alkoxy.

Claim 7. (currently amended) ~~Use The method according to any one of claims 1 to 6~~claim 1, wherein the compound of formula (I) is selected from:
 (1R,2R)-N-[Cyano(2-methoxyphenyl)methyl]-2-(morpholin-4-ylcarbonyl)cyclohexanecarboxamide,
 (1R,2R)-N-[Cyano(2-methoxyphenyl)methyl]-2-{[4-(4-fluorobenzyl)piperazin-1-yl]carbonyl}cyclohexane carboxamide,
 (1R,2R)-N-[Cyano(2-methoxyphenyl)methyl]-2-(3,4-dihydroisoquinolin-2(1H)-ylcarbonyl)cyclohexane carboxamide,
 (\pm) Trans-N-(cyanomethyl)-2-{[4-(4-fluorobenzyl)piperazin-1-yl]carbonyl}cyclohexanecarboxamide,
 (\pm) Trans-N-[cyano(2-methoxyphenyl)methyl]-2-[(4-methylpiperazin-1-yl)carbonyl]cyclohexanecarboxamide,
 (1R,2R)-N-[Cyano(2-methoxyphenyl)methyl]-2-{[4-(4-fluorophenyl)piperazin-1-yl]carbonyl}cyclohexane carboxamide,
 (1R,2R)-N-(4-Cyano-1-methylpiperidin-4-yl)-2-{[4-(4-fluorophenyl)piperazin-1-yl]carbonyl}cyclohexane carboxamide,
 and pharmaceutically acceptable salts thereof.

Claim 8. (cancelled)

Claim 9. (currently amended) A pharmaceutical composition ~~which comprises~~ comprising a compound of the formula (I) as defined in ~~any one of claims 1 to 7~~claim 1 or a pharmaceutically acceptable salt thereof and a pharmaceutically acceptable diluent or carrier.

Claim 10. (currently amended) ~~—~~ A method for producing inhibition of a cysteine protease in a mammal, such as man, in need of such treatment, which comprises administering to said mammal an effective amount of a compound of ~~the present invention~~ as defined in ~~any one of claims 1 to 7~~claim 1, or a pharmaceutically acceptable salt thereof.

Claim 11. (currently amended) A method for producing inhibition of a cysteine protease in a mammal, ~~such as man, in need of such treatment, which comprises~~ comprising administering to said mammal an effective amount of a compound as defined in ~~any one of claims 1 to 7~~claim 1, or a pharmaceutically acceptable salt thereof.

Claim 12. (currently amended) A method for treating pain, ~~such as neuropathic pain, in a mammal, such as man, in need of such treatment, which comprises~~ comprising administering to said mammal an effective amount of a compound as defined in ~~any one of claims 1 to 7~~claim 1, or a pharmaceutically acceptable salt thereof.